(3 mi. west of Roseburg)
Douglas County
Hamilton Ranch
Fluornoy Valley

DIAMOND DRILL CONTRACTING COMPANY
Spokane, Washington

Log of Holes Drilled near Roseburg, Oregon, 1910

Hole #1

FROM	TO	MATERIAL	
0 feet	1 feet	Soil	
1	7	Sand and clay	
7	157	Sandstone	
157	180	Dark shale	
180	251	Sandy shale	
251	269	Sandstone	
269	299	Hard conglomerate	
299	300	Sandrock	
300	305	Hard conglomerate	
305	306	Sandrock	
306	312	Hard conglomerate	
312	313	Sandrock	
313	316	Clay and shale	
316	321	Sandrock	
321	324	Shale	
324	330	Soft clay	
330	335	Soft shale	
335	391	Shale	
391	395	Sandstone	
395	402	Conglomerate	
402	402'8"	Coal	8"
402'8"	404	Shale	
404	411	Sandy shale	
411	412	Shale with coal traces	
412	417	Sandy shale	
417	420 426	Shale, trace coal	
420	426'8"	Coal	6'8"
426	430	Shale	
426'8"	447	Sandy shale	
430	459	Sandstone	
447	465'4"	Shale	
459	466'10"	Coal	7'10"
465'4"	477	Shale	
466'10"	520	Sandstone	
477	524	Shale	
520	536	Sandrock	
524	550	Shale	
536	552	Sandstone	
550	564	Sandstone	
552	602	Shaly sand	
564	615	Sandstone	
602	628	Shaly sand	
615			

Hole #2

FROM	TO	MATERIAL
0 feet	2 feet	Soil
2	16½	Brown clay
16½	17	Blue clay
17	27	Shale sand
27	94	Sandstone
94	94½	Fine clay
94½	158½	Sandstone
158½	174	Shale
174	191	Sandstone
191	194	Conglomerate
194	206	Sandstone
206	229	Sandy shale
229	290	Shale
290	290½	Coal 1/2'
311	311	Shale
312	312	Bone coal and shale
327½	327½	Shale
328½	328½	Dark shale
332	332	Shale
340	340	Sandstone
345	345	Sandy shale
346½	346½	Shale
348½	348½	Coal 2'
352½	352½	Shale
356½	356½	Coal 4'
359½	359½	Shale
375	375	Sandstone
377'4"	377'4"	Shale
379'4"	379'4"	Coal 2'
407	407	Sandy shale
412	412	Sandstone
434	434	Shale
497	497	Sandy shale
507	507	Shale
517	517	Coarse sandstone
527	527	Shale
666	666	Sandstone
832	832	Sandy shale
852	852	Shale
894	894	Sandy shale
950	950	Sandstone
954	954	Hard conglomerate
955	955	Conglomerate
960	960	Sandstone
976	976	Conglomerate
992	992	Sandstone
1002	1002	Sandy shale

Hole #2 (cont.)

FROM	TO	MATERIAL
1024	1024	Dark shale
1035	1035	Shale
1055½	1055½	Sandy shale
1057	1057	Shale, coal trace
1058	1058	Sandstone
	1059	Shale, coal trace
1059	1063	Shaly sand
1063	1075	Sandy shale
1075	1081	Sandstone
1081	1083	Sandy shale
1083	1088	Sandstone
1088	1091	Conglomerate
1091	1098	Sandstone
1098	1100	Sandy shale
1100	1109	Sandstone

Hole #3

0	feet	2	feet	Soil
2		12		Clay
12		27		Shale
27		70		Sandy shale
70		93		Shale
93		133		Sandy shale
133		238		Sandstone
238		249½		Sandstone
249½		263		Sandy shale
263		273		Shaly sand
273		283		Sandy shale
283		286		Bone coal 3'
286		305		Sandstone
305		308		Shaly sand
308		316		Sandstone
316		319		Shaly sand
319		324		Clay
324		344		Shale
344		346		Sandstone
346		354		Shaly sand
354		360½		Fine sandstone
360½		424		Shale
424		425		Sandrock
425		445		Sandstone
445		450		Coal and bone coal 5'
450		452½		Sandy shale
452½		455		Sandstone
455		465		Coarse sandstone
465		482¼		Sandstone
482¼		485		Black shale

Hole #3 (cont.)

FROM	TO	MATERIAL
485 feet	492 feet	Sandy shale
492	494	Sandstone
494	500	Sandy shale
500	529	Sandstone
529	537	Sandy shale
537	545	Shale

We certify that this is an accurate record of three holes drilled by us near Roseburg, Oregon, taken from reports furnished by our drill foreman.

Diamond Drill Contracting Co.
E. H. Knight, Secretary

Log or record of depth of hole #1 drilled on S. Hooper ranch, Flournoy Valley, Douglas County, Oregon. Started March 12th, 1910, finished April 5, 1910. Work done by The Diamond Drill Contracting Company of Spokane, Washington.

Depth of change of formation	Nature of formation	Thickness of formation
0 feet	Soil	1 foot
1 foot	Sandstone and clay	6 feet
7 feet	Sandstone and clay	150 "
157 "	Sandy shale	94 "
251 "	Sandstone	18 "
269 "	Conglomerate	30 "
299 "	Sand rock	1 "
300 "	Conglomerate	5 "
305 "	Sand rock	1 "
306 "	Conglomerate	6 "
312 "	Sand rock	9 "
321 "	Clay or shale	6 "
327 "	Shaly sandstone	63 "
390 "	Sandstone	4 "
394 "	Conglomerate	7 "
401 "	Coal vein	8 inches
401 ft. 8 inches	Shale	1 ft. 4 "
403 feet	Sandy shale	8 feet
411 "	Shale with coal traces	1 "
412 "	Sandy shale	5 "
417 "	Shale and coal (2 4" veins of coal)	3 "
420 "	Fossil conglomerate	1 "
421 "	Shale	5 "
426 "	Coal with gas	8 inches
426 ft. 8 inches	Shale "	9 ft. 4 "
436 feet	Sand rock "	23 feet
459 "	Shale "	6 ft. 4 inches
465 ft. 4 inches	Coal "	1 ft. 2 "
466 ft. 6 inches	Shale "	18 ft. 6 "
485 feet	Sandstone "	29 feet
514 "	Shale "	10 "
524 "	Sandstone "	10 "
534 "	Shale "	30 "
564 "	Sandy shale with fossils gas	10 "
574 "	Sandy shale "	25 "
599 "	Sandstone "	6 "
605 "	Sandy shale with fossils, heavy spasmodic gas	23 "

Log or record of depth of hole #2 drilled on Hamilton ranch, Flournoy Valley, Douglas County, Oregon. Started April 13th, 1910, finished July 6th, 1910. Work done by The Diamond Drill Contracting Company, of Spokane, Washington.

Depth of change of formation	Nature of formation	Thickness of formation
0 feet	Soil	2 feet
2 "	Brown clay	14½ "
16 ft. 6 inches	Blue clay	6 inches
17 feet	Sandy shale	10 feet
27 "	Sandstone	68 "
94 "	Fire clay	6 inches
94 ft. 6 inches	Sandstone	64 feet
158 ft. 6 "	Shaly sand	25 "
183½ feet	Shaly sand	4 ft. 6 inches
188 "	Coarse sand	4 feet
192 "	Conglomerate	3 "
195 "	Sandstone	23 "
218 "	Shale	18 "
236 "	Black shale	6 inches
236 ft. 6 inches	Shale	53½ feet
290 feet	Coal	6 inches
290 ft. 6 inches	Shale	20 ft. 6 "
311 feet	Coal and shale	1 foot
312 "	Shale	15 ft. 6 inches
327½ "	Dark shale	1 foot
328½ "	Shale	3½ feet
332 "	Sandstone	8 feet
340 "	Sandy shale	5 feet
	Sulphur water struck flow of water at 30 feet steadily increasing to 50 feet heavy flow.	
345 "	Brown shale	1½ "
346½ "	Coal	2 " #1
348½ "	Shale	4 "
352½ "	Coal	4 " #2
356½ "	Shale	3 "
359½ "	Sandstone	5½ "
375 "	Shale	2 ft. 4 inches
377 ft. 4 inches	Coal	2 feet #3
379 ft. 4 "	Sandy shale	12 ft. 8 inches
392 feet	Sandy shale	15 feet
407 "	Sandstone	7 "
414 "	Sandy shale	42½ "
456½ "	Sandstone	3½ "
460 "	Sandy shale	48 "
508 "	Coarse sandstone	4 "
512 "	Fine sandstone	4½ "
516½ "	Shaly sand	44 "
560½ "	Fine sand	167 "
727 "	Shaly sand	5 "
832 "	Sandy shale	30 "

Depth of change of formation		Nature of formation	Thickness of formation		
862	feet	Sandstone	90	feet	
950	"	Conglomerate	5	"	
955	"	Sandstone	5	"	
960	"	Conglomerate	16	"	gas
976	"	Sandstone	5	"	
981	"	Sandy shale	54	"	
1035	"	Shaly sand	22½	"	
1057½	"	Shale with coal traces	1½	"	
1059	"	Shaly sand	4	"	
1063	"	Sandy shale	12	"	
1075	"	Sandstone	6½	"	
1081½	"	Sandy shale	1½	"	
1083	"	Sandstone	5	"	
1088	"	Conglomerates	3	"	
1091	"	Sandstone	5	"	
1096	"	Sandstone	2	"	
1098	"	Sandy shale	2	"	
1100	"	Sandstone	2	"	
1109	"	Sandstone	9	"	
		(Complete depth of hole)			

Log or record of depth of hole #3 drilled on Hamilton ranch, Flournoy Valley, Douglas County, Oregon. Started August 5th, 1910, finished August 19th, 1910. Work done by The Diamond Drill Contracting Company of Spokane, Washington.

Depth of change of formation		Nature of formation	Thickness of formation		
0	feet	Soil	2	feet	
2	"	Clay	11	"	
13	"	Shale	30	"	
43	"	Sandy shale	54	"	
97	"	Shaly sand	5	"	
102	"	Sandstone	136	"	
238	"	Shale	11½	"	coal traces
249½	"	Sandy shale	13½	"	
263	"	Shaly sand	10	"	
273	"	Sandy shale	10	"	
283	"	Bony coal	3	"	
286	"	Sandstone	12	"	
298	"	Conglomerate	6	inches	
298½	"	Sandstone	17½	feet	
316	"	Shaly sand	3	"	
319	"	Shale	25	"	
344	"	Sandy shale	10	"	
354	"	Fine sandstone	6½	"	
360½	"	Shale	33½	"	
394	"	Dark shale	11	"	coal traces
405	"	Shale	19½	"	
424½	"	Sandstone	21	"	
445½	"	Bony coal	5	"	
450½	"	Sandy shale	2½	"	
453	"	Sandstone	29¼	"	
482¼	"	Black shale	11¼	"	
493½	"	Sandstone	1½	"	
495	"	Sandy shale	5	"	
500	"	Sandstone	31	"	
531	"	Sandy shale (Complete depth of hole)	14	"	